

ETSI TS 102 232 - Handover explained by EVE

4-5 minutes

ETSI TS 102 232 is the worldwide standard that defines the HI2 and HI3 interfaces. CSPs use these interfaces to transmit intercepted signaling (HI2) and content (HI3) to LEAs.

Generic features (part 1)

LI architecture

The base of TS 102 232 is called "part 1". It defines the basic functional elements of an LI architecture.

A mediation function is located in the network of a CSP. It translates intercepted material into a standardized format. After formatting, it delivers information to the Law Enforcement Monitoring Facility (LEMF).

A LEMF is hosted by an LEA. It is responsible for receiving data from mediation functions. Once securely stored, analysis on the information is performed.

PDU

Part 1 also contains the technical implementation of the data format. It is defined as a PDU. Every piece of intercepted information is delivered using this PDU.

The PDU is encoded using ASN.1. This encoding is similar to binary data formats such as protobuf. And is optimized for high performance.

Data exchange

PDUs are transmitted across IP networks. As these networks may be unreliable, part 1 describes several mechanisms to survive failure in the delivery networks.

This ranges from PDU distribution mechanisms to buffering PDUs in the mediation function.

[Download ETSI TS 102 232-1](#)

Service specific details (or "parts")

Part 2: Messaging

Interception of e-mail protocols such as POP3, IMAP and SMTP is described in part 2. Part 2 also supports protocol agnostic interception of e-mail.

Messaging services in general are also supported in this part.

[Download ETSI TS 102 232-2](#)

Part 3: IP

IP based intercepts are delivered using part 3. Services like fixed line access and wifi are covered.

[Download ETSI TS 102 232-3](#)

Part 4: Layer 2

In certain countries, a CSP may offer Layer-2 service to other CSPs. If the LI obligation falls on the Layer-2 CSP, this part can be used.

[Download ETSI TS 102 232-4](#)

Part 5: Multimedia

Interception of SIP, RTP, MSRP (RCS) is supported by part 5. As such, systems like IMS and services like RCS, VoLTE, VoWIFI are intercepted using this specification.

[Download ETSI TS 102 232-5](#)

Part 6: PSTN/ISDN

Circuit-switched based telephony is intercepted using part 6. It provides an envelope for delivering the legacy [ETSI TS 101 671](#) specification. Services such as POTS, ISDN, 2G telephony, 3G telephony and SMS are supported.

[Download ETSI TS 102 232-6](#)

Part 7: Mobile

Provides an envelope for 2G, 3G, 4G mobile data interception using [3GPP TS 33.108](#).

For 5G, part 7 is the only delivery mechanism. The IRI and CC payloads are defined in [3GPP TS 33.128](#) however.

[Download ETSI TS 102 232-7](#)